

IN THE CLAIMS:

Claim 1. (Currently Amended)      A propulsion system for an amphibious vehicle comprising:

a prime mover;  
marine propulsion means;  
land propulsion means;  
power transmission means; and

control means for controlling adjustable parameters of each of the prime mover, marine propulsion means, land propulsion means, and power transmission means and amphibious vehicle, wherein:- the amphibious vehicle is operable either in a marine mode or in a land mode and when the power transmission means transmits power from the prime mover then the transmitted power is transmitted always to the marine propulsion means whether the vehicle is operated in the marine or land mode; ~~whereby,~~ wherein the power transmission means can deliver power from the prime mover only to the marine propulsion means when the vehicle is operated in the marine mode; wherein the power transmission means can deliver power from the prime mover to both the marine propulsion means and the land propulsion means when the vehicle is operated in the land mode; and wherein the control means comprises electronic processing means and/or electrical, mechanical, hydraulic or electromechanical actuation devices, or any combination thereof and is at least in part made available to a driver of the vehicle to enable the driver to select or control the individual parameters both in marine and land modes using a single actuation device for each parameter and/or each set of parameters.

Claim 2. (Original)      A propulsion system as claimed in claim 1 wherein the control means enables the driver to select or control the following individual parameters;

starting and stopping of the prime mover;  
marine or land mode;  
steering of the vehicle; and  
speed of the vehicle.

Claim 3. (Currently Amended)      A propulsion system as claimed in claim 1 ~~or claim 2~~ wherein the speed of the vehicle both in marine and land modes is controlled by the driver using a single speed controller.

Claim 4. (Currently Amended) A propulsion system as claimed in ~~any one of the preceding claims~~ claim 1 wherein the direction of the vehicle both in marine and land modes is controlled by the driver using a single steering controller.

Claim 5. (Original) A propulsion system as claimed in claim 4 wherein the single steering controller has a range of travel and the range of travel is the same both in marine and land modes.

Claim 6. (Original) A propulsion system as claimed in claim 5 wherein the range of travel of the single steering controller gives the driver access to the full range of vehicle steering available in marine and land modes.

Claim 7. (Original) A propulsion system as claimed in claim 6 wherein the ratio of the range of travel of the single steering controller to the range of vehicle steering available in marine and/or land modes is 1:1.

Claim 8. (Original) A propulsion system as claimed in claim 6 wherein the ratio of the range of travel of the single steering controller to the range of vehicle steering available in marine and/or land modes is other than 1:1.

Claim 9. (Currently Amended). A propulsion system as claimed in ~~any one of the preceding claims~~ claim 1 wherein the power transmission means is a gearbox and the gearbox both in marine and land modes is controlled by the driver using a single gearchange controller.

Claim 10. (Currently Amended) A propulsion system as claimed in ~~any one of the preceding claims~~ claim 1 wherein the control means made available to the driver is operable by the driver when driving in a first driving position when the vehicle is operated in the land mode and is also operable by the driver when driving in a second driving position when elevated more elevated than the first when the vehicle is operated in the marine mode.

Claim 11. (Currently Amended) A propulsion system as claimed in ~~any one of the preceding claims~~ claim 1 wherein when the vehicle is operated in the marine mode the marine propulsion means can power the vehicle to a speed where sufficient hydrodynamic lift is achieved for the vehicle to plane.

Claim 12. (Currently Amended) A propulsion system as claimed in ~~any one of the preceding claims~~ claim 1 wherein the land mode includes entry of the vehicle into the water and egress of the vehicle from the water.

Claim 13. (Currently Amended) A propulsion system as claimed in ~~any one of the preceding claims~~ claim 1 wherein when the amphibious vehicle is operated in the land mode the power transmission mean can simultaneously deliver power from the prime mover to both the marine propulsion means and the land propulsion means in equal or selectively variable proportions.

Claim 14. (Currently Amended) A propulsion system as claimed in ~~any one of the preceding claims~~ claim 1 further comprising decoupling means for selectively decoupling and/or controlling the delivery of power from the prime mover to the land propulsion means.

Claim 15. (Canceled)

Claim 16. (Currently Amended) A propulsion system as claimed in ~~any one of the preceding claims~~ claim 1 wherein the marine propulsion means comprises one or more jet drives.

Claim 17. (Currently Amended) A propulsion system as claimed in ~~any one of the preceding claims~~ claim 1 wherein the land propulsion means comprises one or more driveable wheels.

Claim 18. (Canceled)

Claim 19. (Currently Amended) A propulsion system as claimed in ~~any one of the preceding claims~~ claim 1 wherein the power transmission means comprises a marine power transmitting means for transmitting power from the prime mover to the marine propulsion means and a land power transmitting means for transmitting power from the prime mover to the land propulsion means.

Claim 20. (Original) A propulsion system as claimed in claim 19 wherein the marine and land power transmission means are of the same type.

Claim 21. (Currently Amended) A propulsion system as claimed in claim 19 wherein the marine and land power transmission means are of different types.

Claim 22. (Currently Amended) A propulsion system as claimed in ~~any one of claims 1 to 18~~ claim 1 wherein the power transmission means is mechanical.

Claim 23. (Canceled)

Claim 24. (Canceled)

Claim 25. (Canceled)

Claim 26. (Currently Amended) A propulsion system as claimed in ~~any one of claims 1 to 18~~ claim 1 wherein the power transmission means is hydraulic.

Claim 27. (Canceled)

Claim 28. (Original) A propulsion system as claimed in claim 26 wherein the hydraulic power transmission means includes one or more hydraulic pumps for generating hydraulic power.

Claim 29. (Currently Amended) A propulsion system as claimed in claim ~~27~~ 19 wherein the marine and/or land ~~hydraulic~~ power transmission means includes one or more hydraulic pumps for generating hydraulic power.

Claim 30. (Canceled)

Claim 31. (Canceled)

Claim 32. (Currently Amended) A propulsion system as claimed in ~~any one of claims 1 to 18~~ claim 1 wherein the power transmission means is electric.

Claim 33. (Canceled)

Claim 34. (Canceled)

Claim 35. (Canceled)

Claim 36. (Currently Amended) A propulsion system as claimed in claim 32 ~~or claim 34~~ wherein the electric transmission means includes one or more electric motors for providing drive to the marine and land propulsion means.

Claim 37. (Currently Amended) A propulsion system as claimed in claim ~~33 or claim 35~~ claim 19 wherein the marine and/or land electric transmission means includes one or more electric motors for providing drive to the marine and./or land propulsion means.

Claim 38. (Canceled)

Claim 39. (Canceled)

Claim 40. (Canceled)

Claim 41. (Canceled)

Claim 42. (Canceled)

Claim 43. (Currently Amended) A propulsion system as claimed in ~~any one of the preceding claims~~ claim 1 wherein the prime mover has an integral power take-off shaft which is used to provide power directly to the marine propulsion means.

Claim 44. (Canceled)

Claim 45. (Canceled)

Claim 46. (Currently Amended) An amphibious vehicle incorporating a propulsion system as claimed in ~~any one of claims 1 to 44~~ claim 1.

Claim 47. (Original) An amphibious vehicle as claimed in claim 46, further incorporating one or more wheels which may be retracted above the water line for use on water, and protracted below the water line for use on land.

Claim 48. (Original) An amphibious vehicle as claimed in claim 47 wherein at least one of the one or more wheels is retracted by a fluid suspension arrangement.

Claim 49. (Original) An amphibious vehicle as claimed in claim 48 wherein the axis of at least one of the one or more wheels is retracted by at least 45 degrees.

Claim 50. (Currently Amended) An amphibious vehicle as claimed in claim 48 ~~or claim 49~~ wherein the fluid suspension arrangement is hydraulic.

Claim 51. (Currently Amended) An amphibious vehicle as claimed in ~~any one of claims 48 to 50~~ claim 48 wherein the fluid suspension arrangement is gaseous.

Claim 52. (Currently Amended) An amphibious vehicle as claimed in ~~any one of claims 48 to 51~~ claim 48 wherein the suspension arrangement includes at least one strut.

Claim 53. (Currently Amended) An amphibious vehicle as claimed in claim ~~51~~ 52 wherein the at least one strut is also used for suspension in land mode.

Claim 54. (Canceled)

Claim 55. (Canceled)

Claim 56. (Canceled)

Claim 57. (New) A propulsion system for an amphibious vehicle comprising:  
a prime mover;  
marine propulsion means;  
land propulsion means;  
two transmissions; and  
a controller for controlling the prime mover, marine propulsion means, land propulsion means, and at least one of said two transmissions, wherein the amphibious vehicle is operable either in a marine mode or in a land mode and power is always transmitted from the prime mover to the marine propulsion means whether the vehicle is operated in the marine or land mode, wherein power is transmitted from the prime mover exclusively to the marine propulsion means via one of said transmissions when the vehicle is operated in the marine mode, wherein power is transmitted from the prime mover to both the marine propulsion means and the land propulsion means each via one of said two transmissions when the vehicle is operated in the land mode, and wherein the controller comprises an electronic processor and/or electrical, mechanical, hydraulic or electromechanical actuation devices, or any combination thereof and is at least in part made available to a driver of the vehicle to enable the driver to select or control the individual parameters both in marine and land modes using a single actuation device for each parameter and/or each set of parameters.

Claim 58. (New) The propulsion system of claim 57, wherein the speed of the vehicle both in marine and land modes is controllable by an operator using a single first actuation device.

Claim 59. (New) The propulsion system as claimed in claim 57, wherein the direction of the vehicle both in marine and land modes is controllable by an operator using a single second actuation device.

Claim 60. (New) The propulsion system of claim 57, wherein power transmission in marine and land modes is controllable by an operator using a single third actuation device.